PATENT

In re Application of BARBAS III, et al.

Application No.: 09/500,700 Filed: February 9, 2000

Page 2

Attorney Docket No.: SCRIP1160-4

## <u>AMENDMENTS</u>

## IN THE CLAIMS

Please cancel claims 42-45, without prejudice.

## **Complete Listing of the Claims**

Upon entry of the present amendment, the claims will stand as follows. The following listing of claims will replace all prior versions and listings of the claims in the present application:

- 1. (Cancelled)
- 2. (Previously Presented) An isolated zinc finger-nucleotide binding polypeptide variant comprising at least two zinc finger modules wherein the amino acid sequence of at least one zinc finger module of said variant has at least one amino acid sequence modification, wherein said variant is a mutagenized form of a zinc finger binding protein and binds a polynucleotide sequence different from a sequence bound by the zinc finger-nucleotide binding polypeptide from which the variant is derived and wherein the amino acid sequence of each zinc finger module that binds a polynucleotide sequence different from a sequence bound by the zinc finger-nucleotide binding polypeptide from which the variant is derived comprises two cysteines and two histidines, whereby both cysteines are amino proximal to both histidines.
- 3. (Previously Presented) The variant of claim 2, wherein the zinc finger-nucleotide binding polypeptide is a variant of a protein selected from Zif268 or TFIIIA.
- 4. (Previously Presented) The variant of claim 2, wherein the polypeptide contains a linker region between zinc finger modules, the linker comprising the amino acid sequence TGEKP.
- 5. (Previously Presented) The variant of claim 2, wherein the zinc finger binding polypeptide variant is a truncated zinc finger protein.
- 6-15. (Cancelled)

In re Application of BARBAS III, et al.

Application No.: 09/500,700

Filed: February 9, 2000

Page 3

ردن

16. (Previously Presented) The isolated zinc finger-nucleotide binding polypeptide variant of claim 2, comprising at least three zinc finger modules wherein at least one module binds to a cellular nucleotide sequence.

**PATENT** 

Attorney Docket No.: SCRIP1160-4

- 17. (Previously Presented) The isolated zinc finger-nucleotide binding polypeptide variant of claim 2, comprising at least five zinc finger modules wherein at least one module binds to a cellular nucleotide sequence.
- 18. (Previously Presented) The isolated zinc finger-nucleotide binding polypeptide variant of claim 2, wherein the polypeptide binds to a cellular nucleotide sequence having 18 contiguous base pairs.
- 19. (Previously Presented) The isolated zinc finger-nucleotide binding polypeptide variant of claim 2, wherein the polypeptide binds to a cellular nucleotide sequence comprising two 9-base pair binding sites.

## 20-39. (Cancelled)

- 40. (Previously Presented) An isolated zinc finger-nucleotide binding polypeptide variant produced by a method for isolating a zinc finger-nucleotide binding polypeptide variant which binds to a cellular nucleotide sequence comprising:
  - a) identifying the amino acids in a zinc finger-nucleotide binding polypeptide that bind to a first cellular nucleotide sequence and modulate the function of the nucleotide sequence;
  - b) creating an expression library encoding the polypeptide variant containing randomized substitution of the amino acids identified in step a) above;
  - c) expressing the library in a suitable host cell; and
  - d) isolating a clone that produces a polypeptide variant that binds to a second cellular nucleotide sequence and modulates the function of the second nucleotide sequence,

wherein the variant is comprised of at least two zinc finger modules and wherein the amino acid sequence of at least one module that binds the second nucleotide sequence comprises two cysteines and two histidines whereby both cysteines are amino proximal to

In re Application of BARBAS III, et al.

Application No.: 09/500,700

Filed: February 9, 2000

Page 4

PATENT Attorney Docket No.: SCRIP1160-4

both histidines and wherein at least one of the at least two modules of said variant has at least one amino acid sequence modification.

41-50. (Cancelled)